Approved by the Regents
May 20, 2010

PROMOTION RECOMMENDATION
The University of Michigan
College of Literature, Science, and the Arts

Eitan Geva, associate professor of chemistry, with tenure, College of Literature, Science, and the Arts, is recommended for promotion to professor of chemistry, with tenure, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D.	1996	Hebrew University
B.Sc.	1990	Hebrew University

Professional Record:

2006 – present	Associate Professor, Department of Chemistry, University of Michigan
2000 – 2006	Assistant Professor, Department of Chemistry, University of Michigan
2000	Research Fellow, Department of Chemistry, University of Utah
1998 – 1999	Research Fellow, Chemical Physics, Weizmann Institute of Science
1995 – 1998	Research Fellow, Department of Chemistry, University of Wisconsin

Summary of Evaluations:

Teaching – Professor Geva is an excellent and dedicated classroom teacher, who has received very strong student evaluations. He has a rigorous, but personal and enthusiastic, teaching style that connects well with students. They find his courses intellectually challenging, yet engaging. For the last several years he has concentrated his teaching efforts on physical chemistry curriculum development at the undergraduate and graduate levels. He received an LSA ITC level II grant "Development of Interactive Computer-Aided Tools for Teaching Quantum Chemistry" to improve and enhance Chemistry 461. He also modernized the molecular spectroscopy course for graduate students. Professor Geva is a successful research mentor for students at both the undergraduate and graduate levels.

Research – Professor Geva has garnered national respect and praise as a productive and innovative scholar. He is recognized as a master of semi-classical molecular dynamics theory and his research program continues to attract attention from the international community as evidenced by fifteen invited lectures at meetings and universities since 2006. He has added a major new direction to his research program, modeling nonlinear multidimensional spectroscopy, incorporating new computational tools, and expanding the range of problems studied to include more complex polar and polyatomic systems. These are recognized as significant accomplishments. He has published 21 research articles since his last promotion and has been successful in obtaining funding for his research.

Recent and Significant Publications:

"Two-dimensional infrared spectroscopy of dimanganese decacarbonyl and its photoproducts: An Ab initio study," with C. R. Baize, et al., *Journal of Physical Chemistry A*, 113, 2009, pp. 9617-9623.

"A computational study of the one- and two-dimensional infrared spectra of a vibrational mode strongly coupled to its environment: Beyond the cumulant and condon approximations," with G. Hanna, *Journal of Physical Chemistry B*, 112, 2008, pp.12991-13004.

"Vibrational energy relaxation of a hydrogen-bonded complex dissolved in a polar liquid via the mixed quantum-classical Liouville method," with G. Hanna, *Journal of Physical Chemistry B*, 112, 2008, pp.4048-4058.

"Vibrational energy relaxation rates of H_2 and D_2 in liquid argon via the linearized semiclassical method," with I. Navrotskaya, *Journal of Physical Chemistry A*, 111, 2007, pp. 460-467.

Service – Professor Geva has contributed to the department and the broader university and scientific communities in a number of different roles. He is currently serving as chair of graduate student recruiting, and has served on curriculum, graduate, graduate student admissions, and assistant professor ad hoc mentoring committees. He has also served on the LSA Instructional Technology Committee (ITC). Professor Geva has carried out significant national service, including reviewing manuscripts and grants for a number of different journals and agencies, organizing multiple research symposia, and serving on the Advisory Board of the *Journal of Physical Chemistry*.

External Reviews:

Reviewer (A)

"He is undoubtedly a member of the inner circle of leaders in semi-classical molecular dynamics, and a master of the trade. … Master status in the field is invariably established by methods development, and Geva has done his share in this regard. … His recent submissions on the signatures of 'nonequilibrium solvation dynamics' and his detailed analysis of dimanganese dicarbonyls are seminal contributions that I expect will have lasting value."

Reviewer (B)

"Eitan has established himself as an authority in the theory of condensed matter spectroscopy. … Eitan is an asset to any department. He is a good teacher and instructor to graduate students establishing a vibrant research group. … These achievements would have gained him full professor in [my institution] as well as any first class university."

Reviewer (C)

"…Geva's research record while at Michigan is outstanding. … His expertise on quantum dynamics and skillful use of theoretical tools are widely appreciated. … Geva is one of the leading theoretical dynamicists. He has demonstrated the ability to make important contributions to the quantum dynamics of condensed phase systems, and will undoubtedly continue on his present high slope."

Reviewer (D)

"The question about promoting Eitan Geva to Professor is a simple one to answer — yes, and with enthusiasm. He has become one of the leading figures in theoretical chemistry dealing with spectroscopy and dynamics in complex molecular systems. … I consider his body of work on these topics [2-D vibrational spectroscopy] to be among the very best to date, and I believe is widely recognized as such."

Reviewer (E)
"Geva's work shows a good sense of selecting relevant problems and he maintains close connection with experiments. Geva is among the most creative theorists in the field of chemical physics. … You have a winner. The case for promotion is clear, strong and timely."

Reviewer (F)
"Geva's work is characterized by its readability, by its straightforwardness, by its methodological correctness, and by its computational challenge and accomplishment. …while the experiments are challenging, the theory is much more challenging – I would say that Eitan is the leader in this area..."

Reviewer (G)
"The situation now is very much as one would wish for promotion. Eitan's research topics are in the same general areas, but he has evolved in appropriate ways, particularly into multi-dimensional spectroscopy. … Moreover, when I look at Eitan's citations, I see he is doing well…"

Reviewer (H)
"In terms of his current research, Eitan is known as one of the deepest thinkers, with the most uncompromising standards, in the theoretical condensed phase spectroscopy and dynamics community. …[he] is a brilliant and eminently capable scientist, who is at the forefront of his field, and has established an international reputation. He has accomplished more than what one normally requires for promotion to full professor, and so I enthusiastically recommend that you do just that."

Summary of Recommendation:
Professor Geva has excelled in teaching, service, and research, gaining both national and international recognition. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Associate Professor Eitan Geva be promoted to the rank of professor of chemistry, with tenure, in the College of Literature, Science, and the Arts.

Terrence J. McDonald
Arthur F. Thurnau Professor,
Professor of History and Dean
College of Literature, Science, and the Arts

May 2010